

CLAIMS

What is claimed is:

1. A perforator/skimmer tab former having a plurality of edges and surfaces each edge of said plurality of edges being configured each relative to each other edge and each surface configured in relative position and geometry with each of said edges, said perforator/skimmer tab former comprising:

said plurality of edges having a first edge, a fourth edge and two second edges, said first edge and said fourth edge being substantially at two opposing positions and said first edge elevated above said fourth edge, each of said two second edges substantially opposing each other and with the one end of each contacted with said first edge and the other end of each contacted with said fourth edge and wherein said first edge is the first cutting edge, each of said two second edges being the second cutting edges and said fourth edge being the rolledge, said first edge, when in use is advanced into said plastic within preferably a valley region, and pierces and cuts through the material along one edge and as the former is further advanced, each of said two second edges cause cut and at the same time the plastic material within the cut region is pressed and rolled into the interior of the conduit by a roll surface while being substantially attached or “hinged” along the fourth edge called the rolledge; and

said roll surface causing the rolling of said material being pierced and cut, having four ends and each of said four ends being substantially in contact with one of said edges one portion, said rolling being directed into the interior region of said conduit being created with aperture/skimmer tabs, which said perforator/skimmer tab former, upon activation causes the creation of aperture/skimmer features as part of conduction component for a leach processing system.

2. The perforator/skimmer tab former according to claim 1 wherein said fourth edge further comprises thereon a slight v-shape which causes a small amount of spreading of the plastic thereby inhibiting said skimmer tab from tending to move back toward said aperture of said aperture/skimmer tab from which said skimmer tab was created.

3. The perforator/skimmer tab former according to claim 1 further comprising means for being configured and controlled within a pipe skimmer actuator system for creating a specially designed cylindrical conduit or pipe for use in leaching systems, said means for being configured and controlled being an actuator shaft and spring assembly and means for attaching said actuator shaft and spring assembly to said perforator/skimmer tab former.

4. The perforator/skimmer tab former according to claim 2 further comprising means for being configured and controlled within a pipe skimmer actuator system for creating a specially designed cylindrical conduit or pipe for use in leaching systems, said means for being configured and controlled being an actuator shaft and spring assembly and means for attaching said actuator shaft and

spring assembly to said perforator/skimmer tab former.

5. A pipe skimmer actuator system for creating a specially designed cylindrical conduit for use in leaching systems, said fabrication system comprising:

at least one mold body wherein said at least one mold body has at least a first mold half and at least a second mold half, wherein said first and said second mold halves are advanceable linearly together and wherein said first and said second mold-halves are closeable, thereby creating a cavity into which molten conduit-forming material is injectable and wherein said at least one mold body is openable to release said material when said material is set and formed as conduit and wherein said first mold-half and second mold-half, may be advanced together as mold-halves by, for example, a chain and which mold-halves are closed creating a cavity wherein plastic is injected;

at least one actuatable perforator/skimmer tab former positioned into and a substantial part of at least one of said mold-half is timely activated and forms thereby a perforation and skimmer tab into soft plastic, wherein said perforator/skimmer tab former is actuatable within said at least one mold body;

actuator shafts, springs around said actuator shafts which provide controlled pressure and force to said perforator/skimmer tab former attached thereto, wherein said actuator shaft attached to said perforator/skimmer tab former is configured onto said mold and positioned to create a pipe aperture skimmer when pressure and force is provided to said shaft;

said perforator/skimmer tab former having a first edge tip portion which first edge tip portion is advanced into said plastic within preferably a valley region, said first edge tip portion pierces and cuts through the material along one edge and as said perforator/skimmer tab former is further advanced, two edges are cut by two second edges and at the same time the plastic material within the cut region is pressed or rolled, by a roll surface into the interior of the conduit while being substantially attached or "hinged" along a fourth uncutting roll edge, said fourth edge has incorporated thereon a slight v-shape which causes a small amount of spreading of the plastic thereby inhibiting the skimmer tab from tending to move back toward the aperture from which the tab was created.

6. A method of forming a specially designed cylindrical conduit for use in leaching systems and forming at least one pipe aperture skimmer within corrugated or smooth walled conduit, said method comprising:

forming at least one conduit-forming mold body, each said at least one mold body comprised of a first mold-half and a second mold-half;

locating at least one perforator/skimmer tab former within at least one of either said first or said second mold-halves of said at least one conduit-forming mold body;

linearly advancing said first and said second mold-halves together continually throughout the process;

closing said first and said second mold-halves, thereby creating a cavity wherein conduit-

forming material is injectable;

injecting molten conduit-forming material into said cavity;

while said conduit-forming material is still in a semi-molten state, actuating said at least one perforator/skimmer tab former such that said at least one perforator/skimmer tab former forms a perforation and skimmer tab into the soft conduit-forming material;

withdrawing said at least one perforator/skimmer tab former such that said perforation and skimmer tab, having inwardly rolled edges, is left in said soft conduit-forming material and no conduit-forming material is removed;

allowing the newly formed specially designed cylindrical conduit to cool and set;

opening said first and said second mold-halves of each said at least one mold body; and

removing said formed conduit, having said perforations and skimmer tabs therein, from said at least one conduit-forming mold body.

7. Conduit, having perforations and skimmer tabs therein being produced by the method comprising the steps of:

forming at least one conduit-forming mold body, each said at least one mold body comprised of a first mold-half and a second mold-half;

locating at least one perforator/skimmer tab former within at least one of either said first or said second mold-halves of said at least one conduit-forming mold body;

linearly advancing said first and said second mold-halves together continually throughout the process;

closing said first and said second mold-halves, thereby creating a cavity wherein conduit-forming material is injectable;

injecting molten conduit-forming material into said cavity;

while said conduit-forming material is still in a semi-molten state, actuating said at least one perforator/skimmer tab former such that said at least one perforator/skimmer tab former forms a perforation and skimmer tab into the soft conduit-forming material;

withdrawing said at least one perforator/skimmer tab former such that said perforation and skimmer tab, having inwardly rolled edges, is left in said soft conduit-forming material and no conduit-forming material is removed;

allowing the newly formed specially designed cylindrical conduit to cool and set;

opening said first and said second mold-halves of each said at least one mold body; and

removing said formed conduit, having said perforations and skimmer tabs therein, from said at least one conduit-forming mold body.